

1           1.     In a system including a wireless device and a notification server, wherein  
2 the notification server sends notifications to the wireless device over a low capacity  
3 channel, a method for routing the notifications over a high capacity channel whenever a  
4 high capacity channel is available to the wireless device, the method comprising the  
5 wireless device performing:

6                     an act of detecting the high capacity channel;

7                     an act of notifying the notification server that the wireless device has access  
8 to the high capacity channel;

9                     an act of receiving the notifications from the notification server over the  
10 high capacity channel.  
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12           2.     A method as defined in claim 1, wherein the act of detecting the high  
13 capacity channel further comprises as act of connecting the wireless device with a network  
14 device, wherein the wireless device communicates with the network device over a  
15 communication link, wherein the act of connecting the wireless device can occur  
16 automatically.  
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18           3.     A method as defined in claim 2, wherein the network device is one of a  
19 desktop computer, a blue tooth enabled LAN, and a kiosk. .  
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21           4.     A method as defined in claim 2, wherein the communication link is one of a  
22 serial link, a universal serial bus link, a wireless Bluetooth link and an infrared link.  
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1           5.     A method as defined in claim 1, wherein the act of detecting the high  
2 capacity channel further comprises an act of communicating with a network device over a  
3 communication link.

4  
5           6.     A method as defined in claim 1, wherein the act of notifying the notification  
6 server comprises an act of sending an access notification to the notification server, wherein  
7 the access notification identifies that the high capacity channel is available for notifications  
8 sent to the wireless device.

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10          7.     A method as defined in claim 1, wherein the act of notifying the notification  
11 server further comprises an act of providing the notification server with a new address,  
12 wherein the notifications are routed to the new address.

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14          8.     A method as defined in claim 1, further comprising an act of detecting that  
15 the wireless device no longer has access to the high capacity channel.

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17          9.     A method as defined in claim 8, wherein the act of detecting that the  
18 wireless device no longer has access to the high capacity channel further comprises an act  
19 of sending an acknowledgement to the notification server for each notification received by  
20 the wireless device.

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22          10.    A method as defined in claim 8, wherein the act of detecting that the  
23 wireless device no longer has access further comprises the act of notifying the notification  
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1 server over the low capacity channel that notifications can no longer be sent over the high  
2 capacity channel.

3  
4 11. A computer program product having computer executable instructions for  
5 performing the acts recited in claim 1.

1           12. In a system including a wireless device and a notification server, wherein  
2 the wireless device and the notification server communicate over a low capacity channel, a  
3 method for the wireless device and the notification server to communicate over a high  
4 capacity channel, the method comprising steps for:

- 5                 accessing the high capacity channel by the wireless device;
- 6                 establishing communication over the high capacity channel between the
- 7 wireless device and the notification server;
- 8                 sending notifications over the high capacity channel instead of the low
- 9 capacity channel; and
- 10                when access to the high capacity channel terminates, resume sending
- 11 notifications over the low capacity channel.

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13           13. A method as defined in claim 12, wherein the step for accessing the high  
14 capacity channel further comprises:

- 15                an act for connecting the wireless device with a network device, wherein the
- 16 network device has an existing access to the high capacity channel; and
- 17                an act of detecting the high capacity channel by the wireless device.

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19           14. A method as defined in claim 12, wherein the act of establishing  
20 communication over the high capacity channel further comprises:

- 21                an act of notifying the notification server, by the wireless device, that the
- 22 wireless device has access to the high capacity channel;
- 23                an act of providing the notification server with an address such that the
- 24 wireless device receives the notifications over the high capacity channel; and

1 an act of formatting the notifications for transmission over the high capacity  
2 channel.

3  
4 15. A method as defined in claim 12, further comprising a step for determining  
5 that the wireless device can no longer receive notifications over the high capacity channel.

6  
7 16. A method as defined in claim 15, wherein the step for determining that the  
8 wireless device can no longer receive notifications over the high capacity channel  
9 comprises:

10 an act of sending an acknowledgement by the wireless device for each  
11 notification sent by the notification server; and

12 an act of determining that the wireless device no longer has access to the  
13 high capacity channel if the notification server does not receive a particular  
14 acknowledgement for a particular notification within a predetermined time period.

15  
16 17. A method as defined in claim 12, further comprising a step for resuming the  
17 step for sending notifications over the high capacity channel when the wireless device  
18 again has access to the high capacity channel.

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20 18. A method as defined in claim 12, further comprising a step for preparing the  
21 notification for transmission over the high capacity channel when the wireless device has  
22 access to the high capacity channel.

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19. A method as defined in claim 12, further comprising a step for preparing the notification for transmission over the low capacity channel when the wireless device does not have access to the high capacity channel.

20. A computer program product having computer executable instructions for performing the steps recited in claim 12.

1           21. In a system including a wireless device and a server, wherein the wireless  
2 device receives updates from the server over a first channel through a proxy server, a  
3 method for receiving the updates at the wireless device over a second channel, the second  
4 channel having higher capacity than the first channel, the method comprising:

5                   an act of providing the wireless device with access to the second channel  
6 through a network device when the wireless device is in communication with the  
7 network device;

8                   an act of contacting the proxy server over the second channel to notify the  
9 proxy server that the wireless device has access to the second channel; and

10                   an act of receiving notifications from the server over the second channel  
11 until the wireless device no longer has access to the second channel, wherein the  
12 notification are re-routed by the proxy server over the second channel.

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14           22. A method as defined in claim 21, further comprising an act of receiving  
15 notifications over the first channel when the second channel is not available to the wireless  
16 device.

17  
18           23. A method as defined in claim 21, wherein the act of providing the wireless  
19 device with access to the second channel further comprises an act of connecting the  
20 wireless device at a docking station, the docking station having a communication link with  
21 the network device that provides the wireless device has access to the second channel  
22 through the network device.

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24. A method as defined in claim 21, further comprising an act of sending notifications over the first channel when the wireless devices loses access to the second channel.



1           25. In a system including a wireless device and a notification server, wherein  
2 the notification server sends a notification to the wireless device through a proxy server  
3 over a low capacity channel, a method for routing the notification over a high capacity  
4 channel when the high capacity channel is available, the method comprising:

5                 an act of detecting that the wireless device has access to the high capacity  
6 channel;

7                 an act of the proxy server receiving an access notification from the wireless  
8 device, wherein the access notification informs the proxy server that the wireless  
9 device has access to the high capacity channel;

10                an act of the proxy server routing the notification to the wireless device over  
11 the high capacity channel instead of the low capacity channel; and

12                an act of the proxy server resuming sending the notification to the wireless  
13 device over the low capacity channel when the wireless device no longer has access  
14 to the high capacity channel.

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16           26. A method as defined in claim 25, wherein the act of the proxy server  
17 routing the notification further comprises an act of formatting the notification for  
18 transmission over the high capacity channel.

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20           27. A method as defined in claim 25, wherein the act of detecting the high  
21 capacity channel further comprises an act of connecting the wireless device with the high  
22 capacity network over a communication link.

1           28. A method as defined in claim 27, wherein the communication link is  
2 provided by a network device, the communication link being one of: a serial link, a  
3 universal serial bus link, a wireless Bluetooth link, and an infrared link.  
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5           29. A method as defined in claim 25, further comprising an act of the proxy  
6 server determining that the wireless device no longer has access to the high capacity  
7 channel.  
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9           30. A method as defined in claim 29, wherein the act of the proxy server  
10 determining that the wireless device no longer has access further comprises:

11                   an act of implementing a timeout for the notification sent to the wireless  
12 device; and

13                   an act of resuming sending the notification to the wireless device over the  
14 low capacity channel if an acknowledgement of the notification is not received by  
15 the proxy server before the timeout expires.  
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17           31. A computer readable medium having computer executable instructions for  
18 performing the acts recited in claim 25.  
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1           32. In a system that includes a wireless device and a notification server,  
2 wherein the notification server sends notifications to the wireless device over a low  
3 capacity channel, a computer program product for implementing a method of routing the  
4 notifications over a high capacity channel instead of the low capacity channel when the  
5 high capacity channel is available, comprising:

6                 a computer readable medium for carrying machine-executable instructions  
7 for implementing the method, wherein the method is comprised of computer-  
8 executable instructions for performing acts of:

9                     detecting the high capacity channel by the wireless device, wherein  
10 the wireless device has access to the high capacity channel through a  
11 network device;

12                    notifying the notification server that the wireless device can receive  
13 notifications over the high capacity channel; and

14                    sending notifications over the high capacity channel, wherein the  
15 network device forwards the notifications to the wireless device.

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17           33. A computer program product as defined in claim 32, wherein the method  
18 further comprises:

19                    an act of detecting that the wireless device no longer has access to the high  
20 capacity channel; and

21                    an act of sending notifications over the low capacity channel when the high  
22 capacity channel is unavailable to the wireless device.

1           34.    A computer program product as defined in claim 32, wherein the method  
2 further comprises:

3                   an act of the wireless device sending an acknowledgement to the  
4 notification server for each notification received by the wireless device; and

5                   an act of the notification server determining that the wireless device no  
6 longer has access to the high capacity channel if a particular acknowledgement for  
7 a particular notification is not received in a time period.

8  
9           35.    A computer program product as defined in claim 32, wherein the method  
10 further comprises:

11                   an act of formatting the notification for transmission over the low capacity  
12 channel if the high capacity channel is unavailable; and

13                   an act of formatting the notification for transmission over the high capacity  
14 channel when the wireless device has access to the high capacity channel.

15  
16           36.    A computer program product as defined in claim 32, wherein the method  
17 further comprises an act of docking the wireless device with the network device.